

CRYSTAL CONTROLLED OSCILLATORS

5.0V 7.5x5mm FIXED FREQUENCY OSCILLATOR



CWX815

ABSOLUTE MAXIMUM RATINGS

TABLE 1.0

PARAMETER	UNITS	MINIMUM	NOMINAL	MAXIMUM	UNITS	NOTE
Storage Temperature		-55	-	125	°C	
Supply Voltage	(Vcc)	-0.5	-	7.0	Vdc	

OPERATING SPECIFICATIONS

TABLE 2.0

PARAMETER		MINIMUM	NOMINAL	MAXIMUM	UNITS	NOTE
Frequency Range	(Fo)	1.00	-	100.00	MHz	
Additional Frequencies Available		106.25, 125.00, 155.52 and 156.25			MHz	
Frequency Tolerance		-25	-	25	ppm	1
Operating Temperature Range		-20	-	70	°C	
Supply Voltage	(Vdd)	4.5	5.0	5.5	Vdc	
Supply Current	(Icc)	-	-	45	mA	

INPUT CHARACTERISTICS

TABLE 3.0

PARAMETER		MINIMUM	NOMINAL	MAXIMUM	UNITS	NOTE
Enable Voltage	(Vih)	≥ 2.2	-	-	Vdc	2
Disable Voltage	(Vil)	-	-	≤ 0.8	Vdc	

HCMOS OUTPUT CHARACTERISTICS

TABLE 4.0

PARAMETER		MINIMUM	NOMINAL	MAXIMUM	UNITS	NOTE
LOAD		-	-	50	pF	
Voltage (High)	(Voh)	4.5	-	-	Vdc	
(Low)	(Vol)	-	-	0.4	Vdc	
Current (High)	(Ioh)	-8	-	-	mA	
(Low)	(Iol)	-	-	8	mA	
Duty Cycle at 50% of Vcc		40	50	60	%	
Rise / Fall Time 20% to 80%		-	2	6	nS	
Start-Up Time		-	-	10	mS	
Jitter (BW=10Hz to 20MHz)		-	-	5	ps rms	
Jitter (BW=12kHz to 20MHz)		-	-	1	ps rms	

PACKAGE CHARACTERISTICS

TABLE 5.0

Package	
Package	Hermetically sealed ceramic package

Note:

- Inclusive of calibration @ 25°C, frequency vs. temperature stability, supply voltage change, load change, shock and vibration, 10 years aging.
- Oscillator output is enabled with no connection on pad 1

Standard Frequencies Available (MHz)

TABLE 6.0

1.544	1.8432	2.048	3.6864	4	5
6.48	10	11.0592	12	12.288	14.31818
15.36	16	16.896	19.44	20	24
24.576	25	27	29.498928	29.4912	30
32.768	33	33.33	36	40	44.736
48	49.152	50	60	66	75
80	100	106.25	125	155.52	156.25

TABLE 7.0

Pad	Connection
1	Enable/Disable
2	Ground
3	Output
4	Vcc

TABLE 8.0

Enable / Disable Function	Output
Pin 1 Open	Pin 3 Active
Pin 1 > 2.2V	Pin 3 Active
Pin 1 ≤ 0.8V	Pin 3 High Impedance

DESCRIPTION

The Connor-Winfield CWX815 is a 5.0V, HCMOS, 7.5x5mm, Surface Mount, Fixed Frequency Crystal Oscillator (XO) designed for use in applications requiring high stability and low jitter. The surface mount package is designed for high-density mounting and is optimum for mass production.

FEATURES

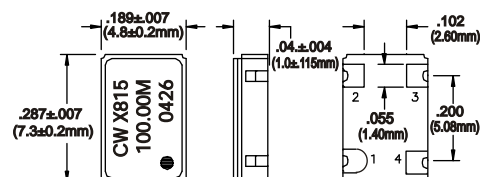
- 1 MHz to 156.25 MHz
- 5.0V OPERATION
- FREQUENCY TOLERANCE: ±25ppm
- TEMPERATURE RANGE: -20 to 70°C
- LOW JITTER: >1 pS RMS
- TRI-STATE ENABLE / DISABLE
- CERAMIC SURFACE MOUNT PACKAGE
- TAPE AND REEL PACKAGING

ORDERING INFORMATION

CWX815 - 100.00 MHz

CLOCK SERIES

CENTER FREQUENCY



Dimensional ±.02" (±0.5mm)
Tolerance: ±.008" (±0.2mm)

Specifications subject to change without notice.

